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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,144	12/31/2003	Shinzo Matsubara	245281US2RDCONT	6872
22850	7590	03/01/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PEREZ, JULIO R	
			ART UNIT	PAPER NUMBER

2681

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/748,144	Applicant(s) MATSUBARA ET AL.	
	Examiner Julio R. Perez	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/31/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,693,875.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions are drawn to a communication network system comprising: a plurality of communication terminals, each having first transmitting means and first receiving means, connected via a transmission channel, information being transmitted and received among said communication terminals through said first transmitting means and said first receiving means; at least two of said communication terminals being used as relay communication terminals.

The narrow limitations are encompassed by the broad limitation and hence it would be obvious to implement the narrow limitations using the limitation of the broad claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheung et al. [hereinafter Cheung], (6,549,786).

Regarding claim 1, Cheung discloses a communication network system comprising: a plurality of communication terminals (Figure 1), each having first transmitting means and first receiving means (col. 3, lines 30-46; Figures 1-3), connected via a transmission channel, information being transmitted and received among said communication terminals through said first transmitting means and said first receiving means (col. 3, lines 30-67; col. 4, lines 10-49; Figures 1-9; the nodes containing transmitting and receiving configurations therein), at least two of said communication terminals being used as relay communication terminals (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes), each of said relay communication terminals comprising: second transmitting means for performing only one-to- one-type communication (col. 3,

lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); second receiving means for performing only one-to-one type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); received-information relay means for transmitting information received from said first receiving means to said second transmitting means and for transmitting information received from said second receiving means to said first transmitting means (col. 3, lines 60-67-col. 4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); relay-terminal-information transmitting means for transmitting to said first transmitting means terminal identification information of said relay terminal and terminal identification information of a terminal to which said relay terminal is providing relay services as relay terminal information (col. 3, lines 60-67-col. 4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); and relay terminal storage means for storing information of said relay terminal and another relay terminal and relay situations of the relay terminals from the

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relay terminal information received from said first receiving means (col. 3, lines 60-67- col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7); , wherein, upon discontinuing the relay services by the relay terminal which is providing the relay services, the presence or the absence of an available relay terminal is determined by referring to said relay terminal storage means, and there is an available relay terminal, an instruction is provided to the terminal which is receiving the relay services to change the relay terminal (col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 2, Cheung discloses, wherein said relay-terminal-information transmitting means has a function of regularly transmitting the relay terminal information (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 3, Cheung discloses, wherein, upon discontinuing the relay services by the relay terminal, the terminal which is receiving the relay services changes from the relay terminal to a subsequent relay terminal, and the subsequent terminal then stores received information until a connection is established with the terminal which is receiving the relay services (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 4, Cheung discloses, a communication network system comprising a plurality of communication terminals (Figure 1), each having first transmitting means and first receiving means, connected via a transmission channel (col. 3, lines 30-46; Figures 1-3), information being transmitted and received among said

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communication terminals through said first transmitting means and said first receiving means, at least one of said communication terminals being used as a central relay communication terminal, and at least one of said communication terminals being used as a relay communication terminal, said relay communication terminal comprising: second transmitting means for performing only one-to-one-type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); second receiving means for performing only one-to-one-type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); received-information relay means for transmitting information received from said first receiving means to said second transmitting means and for transmitting information received from said second receiving means to said first transmitting means (col. 3, lines 60-67-col. 4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); and relay-terminal-information transmitting means for transmitting to said first transmitting means terminal identification information of said relay terminal and terminal identification information of a terminal to which said relay terminal is providing relay services as relay terminal information (col. 3, lines 60-67-col.

4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes), said central relay communication terminal comprising relay-terminal storage means for storing information of said relay terminal and another relay terminal and relay situations of the relay terminals from the relay terminal information received from said first receiving means, thereby designating an available relay terminal to a terminal which makes a request to provide the relay services (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 5, Cheung discloses, wherein at least two of said first transmitting means and at least two of said first receiving means are provided (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 6, Cheung discloses, wherein at least two of said second transmitting means and at least two of said second receiving means are provided (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 7, Cheung discloses, wherein at least two of said first transmitting means and at least two of said first receiving means are provided, and at least two of said second transmitting means and at least two of said second receiving means are provided (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 8, Cheung discloses, a communication network system comprising a plurality of communication terminals, each having first transmitting means and first receiving means, connected via a transmission channel, information being transmitted and received among said communication terminals through said first transmitting means and said first receiving means (col. 3, lines 30-67; col. 4, lines 1049; Figures 1-9; the nodes containing transmitting and receiving configurations therein), at least two of said communication terminals being used as relay communication terminals, each of said relay communication terminals comprising: second transmitting means for performing only one-to-one-type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); second receiving means for performing only one-to-one-type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); third transmitting means for performing only one-to-N-type communication; third receiving means for performing only one-to-N-type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); received-information relay means for transmitting information received from said first receiving means to said second transmitting means

and to said third transmitting means, and for transmitting information received from said second receiving means to said first transmitting means and to said third transmitting means, and for transmitting information received from said third receiving means to said first transmitting means and to said second transmitting means (col. 3, lines 60-67-col. 4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); relay-terminal-information transmitting means for transmitting to said first transmitting means terminal identification information of said relay terminal and terminal identification information of a terminal to which said relay terminal is providing relay services as relay terminal information (col. 3, lines 60-67-col. 4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); and relay terminal storage means for storing information of said relay terminal and another relay terminal and relay situations of the relay terminals from the relay terminal information received from said first receiving means (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7), wherein, upon discontinuing the relay services by the relay terminal which is providing the relay services, the presence or the absence of an available relay terminal is determined by referring to said relay terminal storage means, and if there is an available relay terminal, an instruction is provided to the terminal which is receiving the relay services to change

the relay terminal (col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 9, Cheung discloses, a relay terminal for use in a communication network system which comprises a plurality of communication terminals (Figure 1), each having first transmitting means and first receiving means (col. 3, lines 30-46; Figures 1-3), connected via a transmission channel, information being transmitted and received among said communication terminals through said first transmitting means and said first receiving means (col. 3, lines 30-67; col. 4, lines 10-49; Figures 1-9; the nodes containing transmitting and receiving configurations therein), one of said communication terminals being used as said relay terminal (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes), said relay terminal comprising: second transmitting means for performing only one-to-one-type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); second receiving means for performing only one-to-one-type communication (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); received-information relay means for transmitting information received from said first receiving means to said second transmitting means and for transmitting information received from said second receiving

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means to said first transmitting means (col. 3, lines 60-67-col. 4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); relay-terminal-information transmitting means for transmitting to said first transmitting means terminal identification information of said relay terminal and terminal identification information of a terminal to which means for said terminal is providing relay terminal is providing relay terminal information (col. 3, lines 60-67-col. 4, lines 30-49; col. 8, lines 53-67- col. 9, lines 1-7, the APs serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); and relay terminal storage means for storing information of said relay terminal and another relay terminal and relay situations of the relay terminals from the relay terminal information received from said first receiving means (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7), wherein, upon discontinuing the relay services by the relay terminal which is providing the relay services, the presence or the absence of an available relay terminal is determined by referring to said relay terminal storage means, and if there is an available relay terminal, an instruction is provided to the terminal which is receiving the relay services to change the relay terminal (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Regarding claim 10, Cheung discloses, a method for relaying information between a plurality of communication terminals in a communication network system, at least two of said communication terminals being used as relay communication terminals, said method comprising: a first transmitting step of received from one communication transmitting information terminal to another communication terminal (col. 3, lines 30-46; Figures 1-3); a second transmitting step of transmitting terminal identification information of said relay terminal and terminal identification information of a terminal to which said relay communication terminal is providing relay services as relay terminal information (col. 3, lines 60-67-col. 4, lines 30-49, the Aps serve as nodes to resend, [i.e., relay transmission of data], to other nodes distant nodes; each node further includes its own transmission and receiving means to redirect or resend information to others nodes); a storage step of storing information of said relay terminal and another relay terminal and relay situations of the relay terminals from the relay terminal information transmitted in said second transmitting step (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7); a determining step of determining the presence or the absence of an available relay terminal by referring to the relay terminal information stored in said storage step when said relay terminal discontinues the relay services (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7); and a providing step of providing an instruction to the terminal which is receiving the relay services to change the relay terminal (col. 3, lines 60-67-col. 4, lines 30-49; col. 6, lines 55-67-col. 7, lines 1-67; col. 8, lines 1-67- col. 9, lines 1-7).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Pat. No. 6,877,104 to Shimono Wireless Local Area network
system with recording medium.

US Pat. No. 6,556,553 to Palmer et al. Determining when to forward rate
in a wireless network.

US Pat. No. 6,366,584 to Gulliford et al. Point to point radios.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R. Perez whose telephone number is (571) 272-7846. The examiner can normally be reached on 7:00 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272- 4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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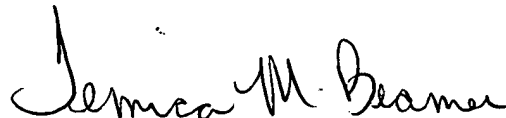
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JP

2/21/06

Julio R Perez
Examiner
Art Unit 2681



TEMICA BEAMER
PRIMARY EXAMINER
2/24/06